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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

Equipment	ID No.	Connected To	RECLAIM	Emissions and	Conditions
		10	Source Type/ Monitoring Unit	Requirements	
Process 17: ELECTRIC GENERATION			memvering emv		
System 1: COGENERATION UNIT NO. 1					
GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411168 508456	D1226	C1242 C1243 S1247	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	[CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; CO: 2,5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]; NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 8-7- 1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]	A63.12, A63.X2, A99.1, A99.2, A99.3, A248.1, A248.2, A248.3, A248.4, A327.1, B61.1, B61.2, B61.3, B61.4, C1.33, C1.34, D12.1, D12.2, D28.1, D90.3, D90.4, D90.17, D94.1, E17.1, E54.1, E73.1, E226.1, H23.1, H23.18, K67.3
BURNER, DUCT, NATURAL GAS, REFINERY GAS, INCLUDING VENT FOR MEROX SYSTEMS NO. 1 & 2, COMMON VENTING SYSTEM, 340 MMBTU/HR A/N 411168 508456	D1227	C1242 C1243	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	[CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 0.01 GRAINS/SCF (5A) [RULE 476, 10-8-1976]; PM: 11 LBS/HR (5B) [RULE 476, 10-8-1976]	A63.X2, A327.2, B61.1, B61.2, B61.3, B61.4, D28.1, D90.3, D90.4, E54.1, E71.1, H23.1, H23.19
STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR, RATED @ 37.5 MW, (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4)	D1228				
A/N 4 11169 508471					



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STEAM TURBINE, STEAM, DRIVING	D1229			
42.78 MVA ELECTRIC GENERATOR				
RATED @ 37.5 MW, (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3, & 4)				
, , , ,				
A/N 411169 508471				
BOILER, WASTE HEAT RECOVERY,	D1230			
STEAM, DUAL PRESSURE, UNFIRED,				
583,000 #/HR STM AT 625 PSIG, 21,400				
#/HR STM@150 PSIG				
A/N 411168 508456				
CONDENSER, STEAM SURFACE,	D1231			
(COMMON TO ALL COGENERATION				
UNITS NO. 1, 2, 3, & 4)				
A/N 411169 508471				
CONDENSER, STEAM, SURFACE,	D1232			
(COMMON TO ALL COGENERATION				
UNITS NO. 1, 2, 3, & 4)			· ·	
1.07.4444.60.700.474				
A/N 411169 508471	50111			
HEAT EXCHANGER, BUTANE	D2111			
VAPORIZER, RPV 4830, (COMMON TO				
ALL COGENERATION UNITS NO. 1, 2, 3,				
& 4)				
A/N 4 11169 508471				
DRUM, KNOCK OUT, BUTANE, RPV	D2112			
4831, COMMON TO ALL	D2112			
COGENERATION UNITS NO. 1, 2, 3, & 4);				
HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN				
TILIOTTI, TITTI, BIRAVILITER, STITOTIV				
A/N 411169 508471				
	Datta			
HEAT EXCHANGER, BUTANE	D2113			
SUPERHEATER, RPV 4832, (COMMON				
TO ALL COGENERATION UNITS NO. 1,				
2, 3, & 4)				
A/N 411169 508471				
BLOWER, RW 0027-08704, BUTANE,	D2114			
CENTRIFUGAL TYPE, VERTICAL	D2114			
POSITION SEALED WITH NITROGEN, 20	/			
HP				
A/N 4 11169 508471				
COMPRESSOR, NO. 1, RW-0045-087.32,	D2740			
10,700 SCFM (COMMON TO ALL	22,10			
COGENERATION UNITS NO. 1, 2, 3 & 4)				
A/N 4 11169 508471				



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D2775						
10,700 SCFM (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4)	COMPRESSOR NO. 2 PW 0046 087.22	D2775	I			
COGENERATION UNITS NG. 1, 2, 3, & 4) AN 411169 508471 DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS AN 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, WITWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PGTI11EA, DRIVING A 90 87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 D2742 D2743 D2744 D2745 D2745 D2745 D2746 D2746 D2746 D2747 PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411169 508471 D2742 D2742 D2742 D2743 D2744 D2745 D2745 D2745 D2746 D2746 D2746 D2747 D2747 D2747 D2747 D2748 D2748 D2748 D2748 D2748 D2748 D2749 D2749 D2741 D2742		D2113				
AN 411169 508471 DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS AN 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AN 411169 508471 D2242 D1233 D1233 C1248 C1249 S1251 SOURCE**: SOURCE**: SOURCE**: SOURCE**: SOURCE**: NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, C1.33, C1.34, C						
DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT	COGENERATION UNITS NO. 1, 2, 3, & 4)					
DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT	A/NI /11160 508/71					
COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT;		D27/11				
UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 1N AN 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS AN 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 AC1248 C1249 NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOX: MAJOR SOURCE** SOX: MAJOR SOURCE** NOX: 96 PPMV (4) [RULE 407, 4-2-1982]; A248.1, A248.1, A248.1, A248.2, A248.3, A248.0], A248.2, A248.3, A248.0, A248.2, A248.3, B61.4, B61.3, B61.3, B61.3, B61.4, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 18-7-1978]; C1.33, C1.33, C1.34, A248.1, A248.1, A248.1, B61.3, B61.4, B61.3, B61.4, RULE 475, 10-8-1976, RULE 475, 18-7-1978]; C1.34, A248.1, A248.1, A248.1, A248.2, A248.3, A248.3, A248.3, A248.4, A248.3,	'	D2/41				
DIAMETER: 4 FT A/N 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411169 508471 PUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 W/A ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 DZ742 DZ742 DZ985 D1233 C1248 C1249 SOX: MAJOR SOURCE** SOURCE** SOURCE** D1233 C1248 C1249 SOX: MAJOR SOURCE** SOURCE** D1233 C1248 C1249 SOX: MAJOR SOURCE** SOX: MAJOR SOURCE** D2585 M63.12, A63.12, A63.22,						
A/N 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG/1111EA, DRIVING A 90 87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 D2585 D1233 C1248 C1249 S1251 SOURCE**; SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** NOX: 96 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]; MOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24*-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.3, B61.4, IRULE 475, 10-8-1976, RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,	DIAMETER: 4 FT					
DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411-169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411-168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, WTWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411-169 508471 D2742 D2742 D2585 H23.3 H23.3 C1248 C1249 SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOWCE** SOWCE** 1303(a)(1)-BACT, 5-10-1996]; A99.1, A99.2, A99.3, A248.1, A99.2, A99.3, A248.1, A248.1, AV1-11-169 508471 A/N 411-169 508471 RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.2, B61.3, B61.4, RULE 475, 8-7-1978]; C1.33, C1.34,	DIMNILILIC. 411					
DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411-169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411-168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, WTWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411-169 508471 D2742 D2742 D2585 H23.3 H23.3 C1248 C1249 SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOWCE** SOWCE** 1303(a)(1)-BACT, 5-10-1996]; A99.1, A99.2, A99.3, A248.1, A99.2, A99.3, A248.1, A248.1, AV1-11-169 508471 A/N 411-169 508471 RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.2, B61.3, B61.4, RULE 475, 8-7-1978]; C1.33, C1.34,	A/N 411169 508471					
PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM NIECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 PUENT OF THE PROPERTY OF THE		D2742				
6 FT 6 IN A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS AN 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, WTWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 B1233 C1248 C1249 NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**, SOX: MAJOR SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE 407, 4-2-1982]; A99.1, A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, C1.33, RULE 475, 10-8-1976, C1.33, C1.34,		D2 / 12				
A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 BELLOW OF THE WORLD STEAM INDECTION OF THE WORLD STEAM INDECTIO						
FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 B1233 C1248 C1249 SOURCE**; SOX: MAJOR SOURCE** SOURCE** SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]; NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,				,		
FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 D1233 C1248 C1249 S0URCE**; SOX: MAJOR SOURCE** SOURCE** SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE 407, 4-2-1982]; C0: 2.5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; A99.1, A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.33, C1.34,	A/N 411169 508471					
MISCELLANEOUS A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 D1233 C1248 C1249 SOURCE**; SOX: MAJOR SOURCE** SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE 407, 4-2-1982]; A63.X2, A63.X2, A63.X2, A63.X2, A63.X2, A99.1, A99.1, A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2001; RULE 2005, 5-6- 2001; RULE 2005, 5-6- 2001; RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,		D2585				H23.3
A/N 411168 508456 System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 A/N 411169 508471 D1233 C1248 C1249 S1251 SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2001; RULE 2005, 5-6-2001; RULE 2005, 5-6-2001; RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,						
System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 BY S1251 C1248 C1249 S1251 SOURCE**; SOX: MAJOR SOURCE** SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE A99.1, A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,			, in the second second			
System 2: COGENERATION UNIT NO. 2 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 BY S1251 C1248 C1249 S1251 SOURCE**; SOURCE**; SOX: MAJOR SOURCE** SOURCE** NOX: 96 PPMV (4) [RULE A99.1, A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,	A/N 411168 508456					
GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 D1233 C1248 C1249 S1251 SOURCE**; SOURCE**; SOURCE** SOURCE** SOURCE** NOX: MAJOR SOURCE** SOURCE** NOX: MAJOR SOURCE** NOX: 96 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]; A99.1, A99.2, A99.3, A248.1, A248.2, [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976]; C1.34,						
STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 S1251 SOURCE**; SOX: MAJOR SOURCE** SOURCE** SOURCE** 1303(a)(1)-BACT, 5-10- 1996]; A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,	GAS TURBINE, W/TWO GAS	D1233	C1248 C1249	NOX: MAJOR	[CO: 2000 PPMV (5)	A63.12,
INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 SOX: MAJOR SOURCE** SOURCE** SOURCE** SOX: MAJOR SOURCE** CO: 2.5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; A99.2, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.4, C1.33, C1.34, C1.34, C1.34, C1.34]	I *		S1251			
REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 SOURCE** SOURCE** 1303(a)(1)-BACT, 5-10- A99.2, A99.3, A248.1, NOX: 96 PPMV (8) A248.2, [40CFR60 Subpart GG, 2- A248.3, A24-2006]; NOX: 8 PPMV A248.4, (4) [RULE 2005, 4-20- A327.1, 2001; RULE 2005, 5-6- B61.1, 2005]; B61.2, B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,				SOX: MAJOR		
MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 1996]; A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV A248.4, (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,				SOURCE**		
RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411169 508471 NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV A248.4, (4) [RULE 2005, 4-20- A327.1, 2001; RULE 2005, 5-6- B61.1, 2005]; B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,	MODEL PG7111EA, DRIVING A 90.87				1996];	A99.3,
A/N 411169 508471 [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV	MVA ELECTRIC GENERATOR, SITE					A248.1,
A/N 411169 508471 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34,	RATED AT 82.72 MW, 985.5 MMBTU/HR					
(4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,					[40CFR60 Subpart GG, 2-	A248.3,
2001; RULE 2005, 5-6- 2005]; B61.2, B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,	A/N 411169 508471			· ·		
2005]; B61.2, B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,						
PM: 11 LBS/HR (5) B61.4, RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,			`			
PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,					2005];	
[RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34,					D16 11 1 DG/HD (5)	,
RULE 475, 8-7-1978]; C1.34,						
					-	
PM: DDI GRAINS/SCE 1 DD7 1					1	*
					PM: 0.01 GRAINS/SCF	D12.1,
(5A) [RULE 475, 10-8- D12.2, 1976, RULE 475, 8-7- D28.1,						,
1978]; PM: 0.1 D90.3, GRAINS/SCF (5B) D90.4,					""	
[RULE 409, 8-7-1981] D90.17,						
[ROLE 409, 8-7-1981] D90.17, D94.1,		7			[KOLE 409, 6-/-1961]	
SO2: 150 PPMV (5B) E17.1,					SO2: 150 PPMV (5R)	
[40CFR60 Subpart GG, 2- E54.1,						
24-2006]; SOX: 2 PPMV E73.1,						
(4) [RULE 2005, 4-20- E226.1,					1	
2001; RULE 2005, 5-6- H23.1,	*					
2005] H23.18,						
K67.3					_	



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BURNER, DUCT, NATURAL GAS, REFINERY GAS, INCLUDING VENT FOR MEROX SYSTEMS NO. 1 & 2, COMMON VENTING SYSTEM, 340 MMBTU/HR A/N 411169 508471	D1234	C1248 C1249 C1252 C1253	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	[CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 0.01 GRAINS/SCF (5A) [RULE 476, 10-8-1976]; PM: 11 LBS/HR (5B) [RULE 476, 10-8-1976]	A63.X2, A327.2, B61.1. B61.2, B61.3, B61.4, D28.1, D90.3, D90.4, E54.1, E71.1, H23.1,
STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR, RATED @ 37.5 MW, (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4) A/N 411169 508471	D1228				
STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR RATED @ 37.5 MW, (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4) A/N 411169 508471	D1229	1			
BOILER, WASTE HEAT RECOVERY, STEAM, DUAL PRESSURE, UNFIRED, 583,000 #/HR STM AT 625 PSIG, 21,400 #/HR STM@150 PSIG A/N 411169 508471	D1235				
CONDENSER, STEAM SURFACE, (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4) A/N 411169 508471 CONDENSER, STEAM, SURFACE,	D1231				
(COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4) A/N 411169 508471 HEAT EXCHANGER, BUTANE	D2111				
VAPORIZER, RPV 4830, (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4) A/N 411169 508471	Datia				
DRUM, KNOCK OUT, BUTANE, RPV 4831, COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4); HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN	D2112				



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HEAT EXCHANGER, BUTANE	D2113			
SUPERHEATER, RPV 4832, (COMMON				
TO ALL COGENERATION UNITS NO. 1,				
$\frac{2}{2}, \frac{3}{4}, \frac{4}{4}$				
$(z, \bar{z}, \bar{\alpha}, \bar{\alpha}, \bar{\gamma})$				
A/N 411169 508471				
BLOWER, RW 0027-08704, BUTANE,	D2114			
CENTRIFUGAL TYPE, VERTICAL	D2114			
POSITION SEALED WITH NITROGEN, 20			·	
HP				
A/N 411169 508471				
COMPRESSOR, NO. 1, RW-0045-087.32,	D2740			
10,700 SCFM (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3 & 4)				
A/N 411169 508471				
COMPRESSOR, NO. 2, RW-0046-087.32,	D2775			
10,700 SCFM (COMMON TO ALL		•		
COGENERATION UNITS NO. 1, 2, 3, & 4)				
COGENERATION ONLY 1, 2, 3, & 4)				
A/N 411169 508471				
	D0741			
DRUM, RPV-4800, SLOP COLLECTING	D2741			
(COMMON TO ALL COGENERATION				
UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT;				
DIAMETER: 4 FT				
A/N 4 11169 508471				
DRUM, RPV-4829, FUEL MIX, HIGH	D2742			
PRESSURE, HEIGHT: 11 FT; DIAMETER:	52,.2			
6 FT 6 IN				
OTTORY				
A/N 4 11169 508471				
FUGITIVE EMISSIONS,	D2586			H23.3
MISCELLANEOUS				
MISCELLI II LOOS				
A/N 4 11169 508471		-		
System 3: COGENERATION UNIT NO. 3				
Ejeren et				



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GAS TURBINE, W/TWO GAS	D1236	C1252 C1253	NOX: MAJOR	[CO: 2000 PPMV (5)	A63.12,
STOP/RATIO VALVES, WITH STEAM		S1255	SOURCE**:	[RULE 407, 4-2-1982];	A63.X2,
INJECTION, BUTANE, NATURAL GAS,			SOX: MAJOR	CO: 2.5 PPMV (4) [RULE	A99.1,
REFINERY GAS, GENERAL ELECTRIC,			SOURCE**	1303(a)(1)-BACT, 5-10-	A99.2.
MODEL PG7111EA, DRIVING A 90.87			BOOKEL	1996];	A99.3,
*				1990],	*
MVA ELECTRIC GENERATOR, SITE				NOV. Of PRIMITO	A248.1,
RATED AT 82.72 MW, 985.5 MMBTU/HR				NOX: 96 PPMV (8)	A248.2,
				[40CFR60 Subpart GG, 2-	A248.3,
A/N 411170 508472				24-2006]; NOX: 8 PPMV	A248.4,
				(4) [RULE 2005, 4-20-	A327.1,
				2001; RULE 2005, 5-6-	B61.1,
				2005];	B61.2,
					B61.3,
				PM: 11 LBS/HR (5)	B61.4,
				[RULE 475, 10-8-1976,	C1.33,
				RULE 475, 8-7-1978];	C1.34,
				PM: 0.01 GRAINS/SCF	D12.1,
				(5A) [RULE 475, 10-8-	D12.2,
				1976, RULE 475, 8-7-	D28.1,
				1978]; PM: 0.1	D90.3,
				GRAINS/SCF (5B)	D90.4,
				[RULE 409, 8-7-1981]	D90.17,
				, ,	D94.1,
				SO2: 150 PPMV (5B)	E17.1,
				[40CFR60 Subpart GG, 2-	E54.1,
				24-2006]; SOX: 2 PPMV	,
					E73.1,
				(4) [RULE 2005, 4-20-	E226.1,
				2001; RULE 2005, 5-6-	H23.18,
				2005]	H23.1,
					K67.3
BURNER, DUCT, NATURAL GAS,	D1237	C1252 C1253	NOX: MAJOR	[CO: 2000 PPMV (5)	A63.X2,
REFINERY GAS, INCLUDING VENT FOR			SOURCE**;	[RULE 407, 4-2-1982];	A327.2,
MEROX SYSTEMS NO. 1 & 2, COMMON			SOX: MAJOR	NOX: 8 PPMV (4) [RULE	B61.1.
VENTING SYSTEM, 340 MMBTU/HR			SOURCE**	2005, 4-20-2001; RULE	B61.2,
· == · · · · · · · · · · · · · · · · ·				2005, 5-6-2005]; PM: 0.1	B61.3,
A/N 4 11170 508472				GRAINS/SCF (5) [RULE	B61.4,
1913 1111/0 300 1 12				409, 8-7-1981]; PM: 0.01	D28.1,
				GRAINS/SCF (5A)	D90.3,
				[RULE 476, 10-8-1976];	D90.4,
				PM: 11 LBS/HR (5B)	E54.1,
	\			[RULE 476, 10-8-1976]	E71.1,
					H23.1,
	/				H23.19
STEAM TURBINE, STEAM, DRIVING	D1228				
42.78 MVA ELECTRIC GENERATOR,	2.220				
RATED @ 37.5 MW, (COMMON TO ALL					
COGENERATION UNITS NO. 1, 2, 3, & 4)					
COGENERATION UNITS NO. 1, 2, 3, & 4)					
A /NI 411170 500451					
A/N 411169 508471					



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STEAM TURBINE, STEAM, DRIVING	D1229			
42.78 MVA ELECTRIC GENERATOR				
RATED @ 37.5 MW, (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3, & 4)				
A/N 411169 508471				
BOILER, WASTE HEAT RECOVERY,	D1238		<u> </u>	
STEAM, DUAL PRESSURE, UNFIRED,	D1236			
583,000 #/HR STM AT 625 PSIG, 21,400				
#/HR STM@150 PSIG				
#/fix \$1M@130 PSIG				
A /NI 411170 500473				
A/N 411170 508472	D1001			
CONDENSER, STEAM SURFACE,	D1231			
(COMMON TO ALL COGENERATION				
UNITS NO. 1, 2, 3, & 4)				
A/N 411169 508471				
CONDENSER, STEAM, SURFACE,	D1232			
(COMMON TO ALL COGENERATION				
UNITS NO. 1, 2, 3, & 4)			*	
A/N 411169 508471				
HEAT EXCHANGER, BUTANE	D2111			
VAPORIZER, RPV 4830, (COMMON TO				
ALL COGENERATION UNITS NO. 1, 2, 3,				
& 4)				
,				
A/N 4 11169 508471				
DRUM, KNOCK OUT, BUTANE, RPV	D2112			
4831, COMMON TO ALL	DZTTZ			
COGENERATION UNITS NO. 1, 2, 3, & 4);				
HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN				
HEIGHT. ITTT, DIAMETER. 3TTO IIV				
A/N 411169 508471				
HEAT EXCHANGER, BUTANE	D2113			
SUPERHEATER, RPV 4832, (COMMON	D2113			
TO ALL COGENERATION UNITS NO. 1.				
2, 3, & 4)				
A/NI 411160 509471				
A/N 411169 508471	D0114			
BLOWER, RW 0027-08704, BUTANE,	D2114			
CENTRIFUGAL TYPE, VERTICAL				
POSITION SEALED WITH NITROGEN, 20				
HP				
A/N 4 11169 508471				
COMPRESSOR, NO. 1, RW-0045-087.32,	D2740			
10,700 SCFM (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3 & 4)				
A/N 411169 508471				



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DOMPRESSOR NO. 2, RW-0046-08732, 10,709 SCFM (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, 8, 4) D2741 DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, 8, 4), HEIGHT: 9 FT; DIAMETER: 4 FT						
10,700 SCFM (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4)	COMPRESSOR, NO. 2, RW-0046-087 32	D2775				
COGENERATION UNITS NO. 1, 2, 3, & 4) AN 411146 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508472 DRUM, REVEAUAGE DRUM, REVEAUAGE R						
AN 411169 508471 DRUM, RPV-4809, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS WO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT AN 411169 508471 PUGITIVE EMISSIONS, MISCELLANFOUS AN 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 9087 MYA ELECTRIC GENERATOR SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AN 411171 508473 AN 411171 508473 D1239 C1256 C1257 SOZ. MAJOR SQURCE*** SOZ. MAJOR SQURCE** SOZ. MAJOR SQURCE** NOX: MAJOR SQURCE** SQURCE** NOX: MAJOR SQURCE** SQURCE** 10303(a)(1).BACT, 5-10-1996); MOY 4. ELECTRIC GENERATOR SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AN 411171 508473 AN 411171 508473 D1239 C1256 C1257 SOZ. MAJOR SQURCE** SQURCE** SQURCE** SQURCE** 10303(a)(1).BACT, 5-10-1996); MOY 4. ELECTRIC GENERATOR SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AN 411171 508473 AN 411171 508473 D1239 C1256 C1257 SOZ. MAJOR SQURCE** SQURCE** SQURCE** 10303(a)(1).BACT, 5-10-1996); MOY 401 FULL 2005, 4-20-2001; RULE 2005, 4-20-2001; RULE 475, 8-7-1978]; B61.1, B61.3, B61.4, C1.34, D90.17, D94.1, B71.1, E54.1, D90.17, D94.1, E54.1, E54.1						
DRUM, RPV-4800, SLOP COLLECTING (COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DIAMETER: 4 FT						
COMMON TO ALL COGENERATION UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT; DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411169 508471 PUGITIVE EMISSIONS, MISCELLANEOUS AN 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM NIJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE ARTED AT 8.27 MW, 985.5 MMBTU/HR AN 411174 508473 AN 4111	A/N 4 11169 508471					
DIAMETER: 4 FT DIAMETER: 6 FT; DIAMETER: 6 FT 6 IN	DRUM, RPV-4800, SLOP COLLECTING	D2741				
DIAMETER: 4 FT A/N 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, WITWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 B/D 1239 C1256 C1257 NOX: MAJOR SOURCE**: SOX: MAJOR SOURCE**: SOX: MAJOR SOURCE**: A/N 303, (A)48, (A) 4991, A991, A991, A991, A993, A994, A993, A2481, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006; NOX: 8 PPMV (4) [RULE 2005, 5-6- 2005]; B/D 121, B/D 122, B/D 123, B/D 123, B/D 124, B/D 124, B/D 125, B/D 124, B/D 125, B/D 124, B/D 125, B/D 124, B/D 125, B/D 124, B/D 124, B/D 125, B/D 124, B/D 125, B/D 124, B/D 124, B/D 125, B/D 125, B/D 124, B/D 125, B/D	(COMMON TO ALL COGENERATION					
AN 411169 508471 DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 IN AN 411179 508471 FUGITIVE EMISSIONS, MISCELLANEOUS AN 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, WITWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 WAY A ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AN 411171 508473 D2587 MOX: MAJOR SOURCE** SOX: MAJOR SOURCE** SOX: MAJOR SOURCE** NOX: 9PMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996; NOX: 9PMV (4) [RULE 249.206; NOX: 8PMV (4) [RULE 2005, 5-6- 2001; RULE 2005, 5-6- 2005]; B61.4, RULE 475, 10-8-1976, RULE 475, 10-8-1981, RULE 475, 10-8-1982, RULE 475, 10-8-1982, RULE 475, 10-8-1982, RULE 475, 10-8-1982, RULE 475, 1	UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT;					
DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 1N	DIAMETER: 4 FT					
DRUM, RPV-4829, FUEL MIX, HIGH PRESSURE, HEIGHT: 11 FT; DIAMETER: 6 FT 6 1N						
PRESSURE, HEIGHT: 11 FT; DIAMETER: 6FT 6 IN AN 4H1H69 508471 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, WITWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 A/N 411171 508473 D1239 C1256 C1257 SOJR. MAJOR SOURCE**: SOJR. MAJOR SOURCE**: SOJR. MAJOR SOURCE**: NOX: 96 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]: NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2- 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 87-1978]: PM: 0.10 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 87-1978]: PM: 0.1 OI GRAINS/SCF (5A) [RULE 475, 87-1978]: PM: 0.1 OI GRAINS/SCF (5A) [RULE 476, 87-1978]: PM: 0.1 OI GRAINS/SCF (5B) [RULE 476, 87-1978]: PM: 0.1 OI GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.3, D90.4, [RULE 2005, 4-20- 2001; RULE 2005, 4-20- 2001; RULE 2005, 4-20- 2010; RUL						
6 FT 6 IN A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411170 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, W/TWO GAS STOPRATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 W/A ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 A/N 411171 508473 D1239 C1256 C1257 S1259 SOX: MAJOR SOURCE**: SOX: MAJOR SOURCE**: SOX: MAJOR SOURCE**: NOX: GP PPW (8) [RULE 407, 4-2-1982]; A63.12, A63.12, A63.12, CO: 2.5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10- 1996]; A248.1, A99.1, A99.2, A99.3, A248.1, A99.1, A99.1, A99.1, A99.1, A99.2, A99.3, A248.1, A99.1, A99.1, A99.1, B61.1, B61.2, B61.3, B61.4, [RULE 475, 10-8-1976, C1.34, DPM: 11 LBS/HR (5) [RULE 475, 10-8-1976, C1.34, DPM: 01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, C1.34, DPM: 01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, C1.34, DPM: 01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, C1.34, DPM: 10 GRAINS/SCF (5A) [RULE 475, 10-8-1976, C2 2-4-2006; C2 2-4-200		D2742				
A/N 411169 508471 FUGITIVE EMISSIONS, MISCELLANEOUS A/N 411170 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, EFFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 A/N 411171 508473 A/N 411171 508473 B/M: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, PM: 01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, PM: 01 GRAINS/SCF (5B) [RULE 475, 10-8-1976, PM: 01 GRAINS/SCF (5A) [RULE						
FUGITIVE EMISSIONS, MISCELLANEOUS AN 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, WTWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 D2587 D1239 C1256 C1257 SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOW: MAJOR SOURCE** SOW: MAJOR SOURCE** SOW: MAJOR SOURCE** NOX: 9 PPMV (4) [RULE 47, 4-2-1982]; A63.X2, A64.X2, A63.X2, A63.X2, A64.X2, A63.X2, A63.X2, A64.X2, A63.X2, A64	6 FT 6 IN					
FUGITIVE EMISSIONS, MISCELLANEOUS AN 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, WTWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 D2587 D1239 C1256 C1257 SOX: MAJOR SOURCE**; SOX: MAJOR SOURCE** SOW: MAJOR SOURCE** SOW: MAJOR SOURCE** SOW: MAJOR SOURCE** NOX: 9 PPMV (4) [RULE 47, 4-2-1982]; A63.X2, A64.X2, A63.X2, A63.X2, A64.X2, A63.X2, A63.X2, A64.X2, A63.X2, A64	A /NI 4111/0 509471					
MISCELLANEOUS A/N 411179 508472 System 4: COGENERATION UNIT NO. 4 GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 MISCELLANEOUS D1239 C1256 C1257 SOURCE** SOURCE** SOURCE** SOURCE** SOURCE** NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.4, REFINERY GAS, GRIERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 MISCELLANEOUS A63.12, A63.32, A63.32, A63.32, A99.1, A99.1, A99.3, A248.1, NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.4, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 479, 8-7-1981] D90.17, D94.1, E17.1, E		D2507				1122.2
A/N 411170 508472 System 4: COGENERATION UNIT NO. 4		D2587				H23.3
System 4: COGENERATION UNIT NO. 4	MISCELLANEOUS					
System 4: COGENERATION UNIT NO. 4	A/NI 411170 508472					
GAS TURBINE, W/TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 D1239 C1256 C1257 S1259 SOURCE** SOURCE** SOURCE** SOURCE** D1239 C1256 C1257 SOURCE** SOURCE** SOURCE** SOURCE** D1239 C1256 C1257 SOURCE** SOURCE** SOURCE** D1239 C1256 C1257 SOURCE** SOURCE** SOURCE** NOX: MAJOR SOURCE** NOX: 96 PPMV (8) [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5A) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; D12.1, D90.3, GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2001; RULE 2005, 5-6-2001						
STOP/RATIO VALVES, WITH STEAM INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 SOURCE** S	3	D1230	C1256 C1257	NOY: MAJOR	[CO: 2000 PPMV (5)	A63 12
INJECTION, BUTANE, NATURAL GAS, REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 SOX: MAJOR SOURCE** SOX: MAJOR SOURCE** SOX: MAJOR SOURCE, 1303(a)(1)-BACT, 5-10-1996]; NOX: 96 PMV (8) (40 (FRULE 2005, 4-20-124-2006); NOX: 8 PPMV (40 (FRULE 2005, 4-20-124-2006); NOX: 8 PPMV (40 (FRULE 2005, 4-20-124-2006); NOX: 9 PMV (40 (FRULE 2005, 4-20-124-2006); NOX: 9 PM		D1239				,
REFINERY GAS, GENERAL ELECTRIC, MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 SOURCE** SOURCE** 1303(a)(1)-BACT, 5-10-1996]; A99.2, A99.3, A248.1, NOX: 96 PPMV (8) A248.2, [40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2001]; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 475, 8-7-1981] D90.17, D90.3, GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20-201]; RULE 2005, 5-6-420.1, E226.1, E23.1, E226.1, E23.1, E226.1, E23.1, E23			51239			
MODEL PG7111EA, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR AVN 411171 508473 AVN 411171 508473 AVI 411171 508473 BEG1.1, BEG1.2, BEG1.3, BEG1.4, CL.33, CL.33, CL.34, PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, CL.33, CL.34, PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, CL.33, CL.33, CL.34, PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, CL.34, DD9.1, DD9.3, DD9.4, DD9.1, DD9						
MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 A/N 4248.1, A/A 4248.2, A/A 4248.2, A/A 4248.2, A/A 4248.3, A/A 441.71 508473 A/N 4248.1, A/A 4248.1, A/A 4248.1, A/A 4248.1, A/A 4248.1, A/A 4248.2, A/A 4248.2, A/A 4248.2, A/A 4248.2, A/A 4248.2, A/A 4248.1, A/A 4248.2, A/A 4248.1, A/A 4248.2, A/A 4248.1,				DOURCE		· · · · · · · · · · · · · · · · · · ·
RATED AT 82.72 MW, 985.5 MMBTU/HR A/N 411171 508473 NOX: 96 PPMV (8)					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
[40CFR60 Subpart GG, 2-24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; B61.1, B61.2, B61.3, B61.4, [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 475, 8-7-1981] D90.3, GRAINS/SCF (5B) [RULE 499, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 5-6-40.2001; RULE 200					NOX: 96 PPMV (8)	
A/N 411171 508473 24-2006]; NOX: 8 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- 2005]; B61.1, B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 10-8- 1978, RULE 475, 8-7- 1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.3, GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, E17.1, E40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,	.,					
2001; RULE 2005, 5-6- 2005]; PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 8-7- 1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,	A/N 411171 508473					A248.4,
2005]; B61.2, B61.3, PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; C1.34, PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 8-7- 1978]; PM: 0.1 D90.3, GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, E17.1, [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,					(4) [RULE 2005, 4-20-	
B61.3, PM: 11 LBS/HR (5) B61.4, [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34, PM: 0.01 GRAINS/SCF D12.1, (5A) [RULE 475, 10-8- D12.2, 1976, RULE 475, 8-7- D28.1, 1978]; PM: 0.1 D90.3, GRAINS/SCF (5B) D90.4, [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) E17.1, [40CFR60 Subpart GG, 2- E54.1, 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- E226.1, 2001; RULE 2005, 5-6- H23.1,			`		2001; RULE 2005, 5-6-	B61.1,
PM: 11 LBS/HR (5) [RULE 475, 10-8-1976, C1.33, RULE 475, 8-7-1978]; C1.34, PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8- 1976, RULE 475, 10-8- 1976, RULE 475, 8-7- 1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,					2005];	B61.2,
[RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF D12.1, D12.2, D12.2, D13.1, D15.2, D1						
RULE 475, 8-7-1978]; PM: 0.01 GRAINS/SCF D12.1, D12.2, SA) [RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 D90.3, D90.4, D90.4, [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-H23.1, E23.1, E2					` ,	
PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976, RULE 475, 10-8-1976, RULE 475, 8-7-1978]; PM: 0.1 D90.3, GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-H23.1, E226.1, 2001; RULE 2005, 5-6-H23.1,						· · · · · · · · · · · · · · · · · · ·
(5A) [RULE 475, 10-8- 1976, RULE 475, 8-7- 1978]; PM: 0.1 D90.3, GRAINS/SCF (5B) D90.4, [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) E17.1, [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV E73.1, (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,						
1976, RULE 475, 8-7- 1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,						
1978]; PM: 0.1 GRAINS/SCF (5B) [RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,						
GRAINS/SCF (5B) D90.4, D90.17, D94.1, SO2: 150 PPMV (5B) E17.1, [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-H23.1, PH 23.1,						,
[RULE 409, 8-7-1981] D90.17, D94.1, SO2: 150 PPMV (5B) [40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,		ľ				
SO2: 150 PPMV (5B) E17.1, [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV (58) E73.1, (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-423.1, PH23.1, PH 2005, 5-6-420-2001; RULE 2005, 5-6-423.1, PH23.1, PH 2005, 5-6-420-2001; RULE 2005, 5-6-42000; RULE 2005, 5-62000; RULE 2005, 5-62000; R						
SO2: 150 PPMV (5B) E17.1, [40CFR60 Subpart GG, 2-24-2006]; SOX: 2 PPMV E73.1, (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-H23.1,		ľ			[KULE 409, 6-/-1981]	
[40CFR60 Subpart GG, 2- 24-2006]; SOX: 2 PPMV E73.1, (4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,					SO2: 150 PPMV (5R)	
24-2006]; SOX: 2 PPMV E73.1, (4) [RULE 2005, 4-20- E226.1, 2001; RULE 2005, 5-6- H23.1,						
(4) [RULE 2005, 4-20- 2001; RULE 2005, 5-6- H23.1,						
2001; RULE 2005, 5-6- H23.1,						·
	▼					
K67.3					=1	



Section H
Facility I.D.:
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Date:

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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

BURNER, DUCT, NATURAL GAS,	D1240	C1256 C1257	NOX: MAJOR	[CO: 2000 PPMV (5)	A63.X2,
REFINERY GAS, INCLUDING VENT FOR			SOURCE**;	[RULE 407, 4-2-1982];	A327.2,
MEROX SYSTEMS NO. 1 & 2, COMMON			SOX: MAJOR	NOX: 8 PPMV (4) [RULE	B61.1.
VENTING SYSTEM, 340 MMBTU/HR			SOURCE**	2005, 4-20-2001; RULE	B61.2,
, '				2005, 5-6-2005]; PM: 0.1	B61.3,
A/N 411171 508473				GRAINS/SCF (5) [RULE	B61.4,
11/14 1111/1 2001/2				409, 8-7-1981]; PM: 0.01	D28.1,
				GRAINS/SCF (5A)	D90.3,
				[RULE 476, 10-8-1976];	D90.3,
				PM: 11 LBS/HR (5B)	E54.1,
				[RULE 476, 10-8-1976]	E71.1,
					H23.1,
CORP. LA COR	54000				H23.19
STEAM TURBINE, STEAM, DRIVING	D1228				
42.78 MVA ELECTRIC GENERATOR,					
RATED @ 37.5 MW, (COMMON TO ALL					
COGENERATION UNITS NO. 1, 2, 3, & 4)					•
A/N 411169 508471					
STEAM TURBINE, STEAM, DRIVING	D1229				
42.78 MVA ELECTRIC GENERATOR					
RATED @ 37.5 MW, (COMMON TO ALL					
COGENERATION UNITS NO. 1, 2, 3, & 4)					
, , , , , , , , , , , , , , , , , , , ,					
A/N 4 11169 508471					
BOILER, WASTE HEAT RECOVERY,	D1241				
STEAM, DUAL PRESSURE, UNFIRED,	D1211				
583,000 #/HR STM AT 625 PSIG, 21,400					
#/HR STM@150 PSIG					
#/11K 51W(@15015IO					
A/N 411171 508473					
CONDENSER, STEAM SURFACE,	D1231				
	D1231				
(COMMON TO ALL COGENERATION					
UNITS NO. 1, 2, 3, & 4)					
1.07.4444.60.700.474					
A/N 411169 508471					
CONDENSER, STEAM, SURFACE,	D1232				
(COMMON TO ALL COGENERATION					
UNITS NO. 1, 2, 3, & 4)					
A/N 411169 508471					
HEAT EXCHANGER, BUTANE	D2111				
VAPORIZER, RPV 4830, (COMMON TO	/				
ALL COGENERATION UNITS NO. 1, 2, 3,					
& 4)					
,					
A/N 411169 508471					
DRUM, KNOCK OUT, BUTANE, RPV	D2112				
4831, COMMON TO ALL	102112				
COGENERATION UNITS NO. 1, 2, 3, & 4);					
HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN					
A /NI 411160 500471					
A/N 411169 508471]				



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

HEAT EXCHANGER, BUTANE	D2113			
SUPERHEATER, RPV 4832, (COMMON				
TO ALL COGENERATION UNITS NO. 1,				
2, 3, & 4)				
A/N 411169 508471				
BLOWER, RW 0027-08704, BUTANE,	D2114			
CENTRIFUGAL TYPE, VERTICAL				
POSITION SEALED WITH NITROGEN, 20				
HP				
nr				
A/N 411169 508471				
COMPRESSOR, NO. 1, RW-0045-087.32,	D2740			
10,700 SCFM (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3 & 4)				
, , , ,				
A/N 411169 508471				
COMPRESSOR, NO. 2, RW-0046-087.32,	D2775			
	D2773			
10,700 SCFM (COMMON TO ALL				
COGENERATION UNITS NO. 1, 2, 3, & 4)			· ·	
A/N 411169 508471				
DRUM, RPV-4800, SLOP COLLECTING	D2741			
(COMMON TO ALL COGENERATION	22,			
UNITS NO. 1, 2, 3, & 4), HEIGHT: 9 FT;				
DIAMETER: 4 FT				
A/N 4 11169 508471				
DRUM, RPV-4829, FUEL MIX, HIGH	D2742			
PRESSURE, HEIGHT: 11 FT; DIAMETER:				
6 FT 6 IN				
OFTOIN				
A DI 4111 (O 500 451				
A/N 411169 508471				
FUGITIVE EMISSIONS,	D2588			H23.3
MISCELLANEOUS				
A/N 411171 508473				
System 9: COGENERATION UNIT 5				S2.X1,
System 7: COGENERATION UNIT 5				
				S7.X1,
				S31.10



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GAS TURBINE, NATURAL GAS,	DX1	CX1 CX2	NOX: MAJOR	CO: 2 PPMV (4) [RULE	A63.X1,
REFINERY GAS, GENERAL		SX1	SOURCE**;	1303(a)(1)-BACT, 5-10-	A63.X2,
ELECTRIC, MODEL 7EA, WITH DRY			SOX: MAJOR	1996; RULE 1303(a)(1)-	A99.X2,
LOW NOX COMBUSTORS, 1069.9			SOURCE**	<i>BACT, 12-6-2002;</i> RULE	A99.X3,
MMBTU/HR				1703 PSD Analysis, 10-7-	A99.X4,
				1988]; CO: 3 PPMV (4)	A99.X5,
A/N: 496922				[RULE 1303(a)(1)-	A99.X6,
				BACT, 5-10-1996; RULE	A99.X7,
GENERATOR, ELECTRIC,				1303(a)(1)-BACT, 12-6-	A248.X1,
NOMINAL RATING AT				2002; RULE 1703 PSD	A248.X2,
85 MW (NET)				Analysis, 10-7-1988]; CO:	A248.X3,
				2000 PPMV (5) [RULE	A248.X4,
				407, 4-2-1982]	A327.1,
					A433.X1,
				NOX: (INTERIM) 44	B61.X1,
				LBS/MMCF (1) [RULE	B61.X2,
				2012, 5-6-2005]; NOX: 15	C1.X1,
				PPMV (8) [40 CFR 60	D12.1,
				Subpart KKKK, 6-6-	D12.X1,
				2006]; NOX: 2 PPMV (4)	D29.X1,
				[RULE 2005, 5-6-2005;	D29.X3,
				RULE 1703 PSD	D29.X4,
				Analysis, 10-7-1988]	D82.X1,
					D82.X2,
				PM: 11 LBS/HR (5)	D90.X1,
				[RULE 475, 10-8-1976;	D90.X2,
				RULE 475, 8-7-1978];	D94.1,
				PM: 0.01 GRAINS/SCF	E193.X,
				(5A) [RULE 475, 10-8-	H23.X1,
				1976; RULE 475, 8-7-	H23.X2,
				1978]; PM: 0.1	I296.X1,
				GRAINS/SCF (5B)	K40.X,
				[RULE 409, 8-7-1981]	K67.3,
					K67.X1
				SOX: (INTERIM) 0.80	
				LBS/MMCF (1)	
				NATURAL GAS [RULE	
				2011, 5-6-2005]; SOX:	
				(INTERIM) 5.07	
)			LBS/MMCF (1)	
				REFINERY GAS [RULE	
				2011, 5-6-2005]; SOX:	
				0.06 LBS/MMBTU (8)	
				[40 CFR 60 Subpart	
				KKKK, 6-6-2006]; SO2:	
				(9) [40CFR72 – ACID	
				RAIN]	
				,	
				VOC: 2 PPMV (4)	
				[RULE 1303(a)(1)-	
				BACT, 5-10-1996; <i>RULE</i>	
				1303(a)(1)-BACT, 12-6-	
				20021	
	1	I .	I	2002	



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BOILER, TURBINE EXHAUST HEAT	DX2	CX1 CX2	NOX: MAJOR	CO: 2 PPMV (4) [RULE	A63.X1,	
RECOVERY, NATURAL GAS,	DAL	SX1	SOURCE**;	1303(a)(1)-BACT, 5-10-	A63.X1,	
		SAI			,	
REFINERY GAS, UNFIRED, 624,000			SOX: MAJOR	1996; RULE 1303(a)(1)-	A99.X2,	
LBS/HR STEAM, 510 MMBTU/HR			SOURCE**	<i>BACT, 12-6-2002;</i> RULE	A99.X3,	
WITH				1703 PSD Analysis, 10-7-	A99.X4,	
				1988]; CO: 3 PPMV (4)	A99.X5,	
A/N: 496922				[RULE 1303(a)(1)-	A99.X6,	
				BACT, 5-10-1996; <i>RULE</i>	A99.X7,	
BURNER, DUCT, NATURAL				1303(a)(1)-BACT, 12-6-	A248.X1,	
GAS, REFINERY GAS, LOW				2002; RULE 1703 PSD	A248.X2,	
NOX BURNER, 510				Analysis, 10-7-1988]; CO:	A248.X3,	
MMBTU/HR				2000 PPMV (5) [RULE	A248.X4,	
				407, 4-2-1982]	A327.2,	
					A433.X1,	
			'	NOX: 2 PPMV (4)	B61.X1,	
				[RULE 2005, 5-6-2005;	B61.X2,	
				RULE 1703 PSD	C1.X2,	
				Analysis, 10-7-1988];	D12.X1,	
				NOX: (INTERIM) 44	D29.X1,	
				LBS/MMCF (1) [RULE	D29.X3,	
				2012, 5-6-2005]; NOX: 15	D29.X4,	
				PPMV (8) [40 CFR 60	D82.X1,	
				Subpart KKKK, 6-6-	D82.X2,	
				2006];	D90.X1,	
					D90.X2,	
				PM: 11 LBS/HR (5)	I296.X1,	
				[RULE 476, 10-8-1976];	H23.X2,	
				PM: 0.01 GRAINS/SCF	K40.X,	
				(5A) [RULE 476, 10-8-	K67.X1	
				1976]; PM: 0.1		
				GRAINS/SCF (5B)		
				[RULE 409, 8-7-1981]		
				[KCLE 409, 6-7-1981]		
				SOV. (INTEDIM) 0.90		
				SOX: (INTERIM) 0.80		
			1	LBS/MMCF (1)		
				NATURAL GAS [RULE		
				2011, 5-6-2005]; SOX:		
				(INTERIM) 5.07		
				LBS/MMCF (1)		
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			REFINERY GAS [RULE		
	\			2011, 5-6-2005]; SOX:		
	1			0.06 LBS/MMBTU (8)		
	l .			[40 CFR 60 Subpart		
	ľ			KKKK, 6-6-2006]; SO2:		
				(9) [40CFR72 – ACID		
				RAIN]		
				VOC: 2 PPMV (4)		
				[RULE 1303(a)(1)-		
				BACT, 5-10-1996; <i>RULE</i>		
				1303(a)(1)-BACT, 12-6-		
		L		2002]	S7.X1,	
System 10: AIR POLLUTION CONTROL SYSTEM NO. 5						



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SELECTIVE CATALYTIC	CX1	DX1 DX2	NH3: 5 PPMV (4) [RULE	A99.X1,
REDUCTION, NO. 5, WITH AMMONIA		CX2	1303(a)(1)-BACT, 5-10-	195.X1,
INJECTION, CORMETECH OR			1996; RULE 1303(a)(1)-	D12.X2,
EQUIVALENT, 1600 CU. FT.			BACT, 12-6-2002	D12.X3,
			-	D12.X4,
A/N 496924				D29.X2,
				E57.X1,
AMMONIA INJECTION				E73.X1
REACTOR, CARBON MONOXIDE	CX2	DX1 DX2		D12.X5
OXIDATION, APC NO. 5, ENGELHARD		CX1		
OR EQUIVALENT, 1600 CU. FT.				
A/N 496924				
AMMONIA INJECTION	CX3			
A/N 496924				
STORAGE TANK, HORIZONTAL, 44'	DX3			C157.X,
11" L x 7' DIA; WITH VAPOR RETURN				E144.X
LINE, AQUEOUS AMMONIA, 30%,		· ·		
12000 GALS				
A/N 508474				
STACK, EXHAUST SYSTEM SERVING	SX1	DX1 CX1		
SCR NO. 5, HEIGHT: 100 FT;		CX2		
DIAMETER: 15 FT 6 IN				
A/N 496924				
			V	

S2.X1 The operator shall limit emissions from this system as follows:

CONTAMINANT	EMISSIONS LIMIT	
NOx	Less than 39.9 TONS IN ANY 12-MONTH PERIOD	

Compliance with this limitation shall be determined monthly and shall be based on the total emissions over the previous 12 month period.

[RULE 1703 PSD Analysis, 10-7-1988]

[Systems subject to this condition: Process 17, System 9]

S7.X1 The following condition shall apply to all refinery operation and related devices from this system:

The operator shall upon completion of construction, operate and maintain this equipment in accordance with all mitigation measures stipulated in the Final California Energy Commission decision for the 09-AFC-1 project.



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

The operator shall maintain records, in a manner approved by the District, to demonstrate compliance with the applicable measures stipulated in the "Final California Energy Commission decision for the 09-AFC-1 project" document.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition: Process 17, System 9, 10]

S7.X2 The following condition shall apply to all refinery operation and related devices from this system:

The operator shall submit to the District for review and approval, final drawings and specifications of the selective catalytic reduction system and carbon monoxide oxidation catalytic reactor to be installed, at least 30 days prior to construction. This equipment shall meet performance specifications stated in the application for permit to construct for the APC system serving Cogeneration Unit No. 5.

[RULE 1303(a)(1)-BACT, 5-10-1996; ; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 17, System 10]

S31.10 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 454566, 454567, 454568, 458598, 458600, 458610, 459257, 459284, 459286 & **496922**:

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The valves and flanges shall be categorized by size and service. The operator shall submit a listing of all new non-bellows seal valves which shall be categorized by tag no., size, type, operating temperature, operating pressure, body material, application, and reasons why bellows seal valves were not used.

All new valves in VOC service, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be bellows seal valves, except as approved by the District, in the following applications: heavy liquid service, control valve, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g., drain valves with valve stems in horizontal position), retrofits/special applications with space limitations, and valves not commercially available.



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All new valves and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g., numbers ending in the letter "N"), and shall be noted in the records.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service, except those specifically exempted by Rule 1173, shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change to a quarterly inspection program with the approval of the District.

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv.

All new components in VOC service with a leak greater than 500 ppmv but less than 1,000 ppmv, as methane, measured above background using EPA Method 21 shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief valve, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

The operator shall keep records of the monthly inspection (quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer or his authorized representative upon request.

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to a closed vent system or equipped with a rupture disc and telltale indicator.

All pumps shall utilize double seals and be connected to a closed vent system.

All compressors to have a seal system with a higher pressure barrier fluid.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[Systems subject to this condition: Process 17, System 9]

A63.12 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 108 LBS PER DAY
NOX	Less than or equal to 2156 LBS PER DAY
SOX	Less than or equal to 59 LBS PER DAY
	Less than or equal to 82 LBS PER DAY
PM	Less than or equal to 186 LBS PER DAY

The operator shall calculate the emissions, as the total emissions from the waste heat boiler exhaust of a cogeneration unit during the 24 hours of operation following firing.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A63.X1 The operator shall limit emissions from this equipment as follows

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 3.095 LBS IN ANY ONE MONTH

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment DX1 (Gas turbine) and DX2 (Duct Burner). The operator shall calculate emissions by using monthly fuel use data and an emissions factor 2.64 lbs VOC/MMscf for Natural Gas. For Refinery Gas, the following formula should be used to calculate emissions factors, in units of lbs VOC/MMscf: 2.94E-7 x F_d -Factor x GCV_v ; where the F_d -Factor is the ratio of the volume of products of combustion to the fuel heat content, in units of dscf/MMBtu, and GCV_v is gross fuel calorific value, in units of Btu/scf. Monthly averages of F_d -Factor and GCV_v for Refinery Gas shall be used in this calculation.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A63.X2 The operator shall limit emissions from this equipment as follows



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 1,243 lbs in any one day

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from Cogeneration Units 1 (D1226 and D1227 in Process 17, System 1), 2 (D1233 and D1234 in Process 17, System 2), 3 (D1236 and D1237 in Process 17, System 3), 4 (D1239 and D1240 in Process 17, System 4), and 5 (DX1 and DX2 in Process 17, System 9).

The operator shall initially calculate the daily PM10 emissions using daily fuel use data for each combustion unit (D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240, DX1 and DX2), the higher heating value of the fuel burned in each combustion unit, and the following emissions factors: 0.00393 lbs PM10 / MMBTU for Natural Gas or Butane and 0.00402 lbs PM10 / MMBTU for Refinery Gas.

The PM10 emission factor for Cogeneration Units 1, 2, 3, 4, and 5 shall be revised annually based on results of individual PM10 source tests performed as specified in permit conditions D28.1 and D29X4. The PM10 emission factor shall be calculated as the average emission rate in lb/MMBtu for all valid source test runs during each individual source test.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

A99.1 The 8 PPM NOX emission limit(s) shall not apply when this equipment is operating during startup and shutdown modes.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A99.2 The 2.5 PPM CO emission limit(s) shall not apply when the associated gas turbine is operating at less than 85 percent of the rated capacity. This condition refers to CO emission limit.

[RULE 1303(a)(1)-BACT, 5-10-1996]



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[Devices subject to this condition: D1226, D1233, D1236, D1239]

A99.3 The 2.5 PPM CO emission limit(s) shall not apply when the equipment is operating at startup and shutdown modes.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A99.X1 The 5 ppm NH3 limit(s) shall not apply during commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 550 hours. The time for cold startup shall not exceed 3 hours for each startup. The time for warm startup shall not exceed 1 hour. The time for shutdown shall not exceed 1 hour. The turbine shall be limited to 4 cold startups per year, 12 warm startups per year, and 16 shutdowns per year. Written records of commissioning, cold startups, warm startups and shutdowns shall be maintained and made available upon request from the Executive Officer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

A99.X2 The 2 PPM NOX emission limit(s) shall not apply during commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 550 hours. The time for cold startup shall not exceed 3 hours for each startup. The time for warm startup shall not exceed 1 hour. The time for shutdown shall not exceed 1 hour. The turbine shall be limited to 4 cold startups per year, 12 warm startups per year, and 16 shutdowns per year. Written records of commissioning, cold startups, warm startups and shutdowns shall be maintained and made available upon request from the Executive Officer.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

A99.X3 The 2 PPM CO emission limit(s) shall not apply during commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 550 hours. The time for cold startup shall not exceed 3 hours for each startup. The time for warm startup shall not exceed 1 hour. The time for shutdown shall not exceed 1 hour. The turbine shall be limited to 4 cold startups per year, 12 warm startups per year,



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and 16 shutdowns per year. Written records of commissioning, cold startups, warm startups and shutdowns shall be maintained and made available upon request from the Executive Officer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A99.X4 The 3 PPM CO emission limit(s) shall not apply during commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 550 hours. The time for cold startup shall not exceed 3 hours for each startup. The time for warm startup shall not exceed 1 hour. The time for shutdown shall not exceed 1 hour. The turbine shall be limited to 4 cold startups per year, 12 warm startups per year, and 16 shutdowns per year. Written records of commissioning, cold startups, warm startups and shutdowns shall be maintained and made available upon request from the Executive Officer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A99.X5 The 44 LBS/MMCF NOX emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from the initial startup date.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

A99.X6 The 0.80 LBS/MMCF SOX emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from the initial startup date.

[RULE 2011, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

A99.X7 The 5.07 LBS/MMCF SOX emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from the initial startup date.



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[RULE 2011, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

A195.X1 The 5 PPM NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2, dry. The operator shall calculate and continuously record the NH3 slip concentration using the following:

NH3(ppmv) = [a-b*c/1E6]*1E6/b

where,

a= NH3 injection rate (lb/hr)/17(lb/lbmole)

b= dry exhaust gas flow rate(lb/hr)/29(lb/lbmole)

c= change in measured NOx across the SCR (ppmvd at 15 percent O2).

The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least every 12 months.

The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The operator shall use the method above or another alternative method approved by the Executive officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

A248.1 The 8 PPM NOX emission limit is dry, corrected to 15 percent oxygen.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A248.2 The 2 PPM SOX emission limit is dry, corrected to 15 percent oxygen.



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A248.3 The 2.5 PPM CO emission limit is dry, corrected to 15 percent oxygen.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A248.4 The 4.5 PPM CO emission limit is dry, corrected to 15 percent oxygen.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

A248.X1 The 2 PPMV NOX emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

A248.X2 The 2 PPMV CO emission limit(s) are averaged over 180 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A248.X3 The 3 PPMV CO emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A248.X4 The 2 PPMV VOC emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry.



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition: **DX1**, D1226, D1233, D1236, D1239]

A327.2 For the purpose of determining compliance with District Rule 476, combustion contaminant emissions may exceed the concentration limit or mass emission limit listed, but not both limits at the same time.

[RULE 476, 10-8-1976]

[Devices subject to this condition: **DX2**, D1227, D1234, D1237, D1240]

A433.X1 The operator shall comply at all times with the 2.0 ppm 1 hour BACT limit for NOx, except as defined in condition A99.X2, and for the following operating scenarios:

Operating Scenario	Maximum Hourly Emission Limit	Operational Limit
Cold Start	175.0	NOx emissions shall not exceed 211.24 lbs per cold start-up.
Warm Start	21.32	NOx emissions shall not exceed 21.32 lbs per warm start-up.
Shutdown	12.85	NOx emissions shall not exceed 12.85 lbs per shutdown.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: DX1, DX2]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The oper	ator shall comply with the terms and	conditions set forth below:
B61.1	The operator shall only use refiner	y gas containing the following specified compounds:
	Compound	ppm by volume
	Total Sulfur less than	100
[RULE 1	303(a)(1)-BACT, 5-10-1996]	
[Devices	subject to this condition: D1226, D1	227, D1233, D1234, D1236, D1237, D1239, D1240]
B61.2	The operator shall only use butane	containing the following specified compounds:
	Compound	ppm by volume
	Total Sulfur less than	50
[RULE 1	303(a)(1)-BACT, 5-10-1996]	
[Devices	subject to this condition: D1226, D1	227, D1233, D1234, D1236, D1237, D1239, D1240]
B61.3	The operator shall only use natural	gas containing the following specified compounds:
	Compound	ppm by volume
	Total Sulfur less than	5
[RIII F 1	303(a)(1)-BACT, 5-10-1996]	
[KOLL 1	303(a)(1)-D/IC1, 3-10-1770]	
[Devices	subject to this condition: D1226, D1	227, D1233, D1234, D1236, D1237, D1239, D1240]
B61.4	The operator shall not use fuel gas	, except uncombined natural gas which is not regulated
D01. 4	by this condition, containing the fo	
	Compound	ppm by volume
	H2S greater than	160
[40CFR	60 Subpart J, 6-24-2008]	

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

B61.X1 The operator shall not use refinery gas containing the following specified compounds:

Compound	ppm by volume
Total Reduced Sulfur (calculated as H2S) greater than	40
Total Reduced Sulfur (calculated as H2S) greater than	30

The 40 ppm limit shall be based on a rolling 3-hour averaging period. The 30 ppm limit shall be based on a rolling 24-hour averaging period.

Refinery gas is defined as a mixture of refinery fuel gas, produced within the refinery, and natural gas obtained from a utility regulated by the Public Utilities Commission (PUC), for which the natural gas component of the mixture shall not exceed 50% of the total, by Higher Heating Value (HHV) content.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

B61.X2 The operator shall not use fuel gas, except uncombined natural gas which is not regulated by this condition, containing the following specified compounds:

Compound	ppm by volume
H2S greater than	162
H2S greater than	60

The 162 ppm limit shall be based on a rolling 3-hour averaging period. The 60 ppm limit shall be based on a rolling 365 successive day average.

[40CFR 60 Subpart Ja, 6-24-2008]

[Devices subject to this condition: DX1, DX2]

C1.33 The operator shall limit the duration of shutdown to no more than 4 hour(s).

For the purpose of this condition, "duration of shutdown" shall be defined as the duration prior to extinguishing the flame in the gas turbine.

[RULE 1303(a)(1)-BACT, 5-10-1996]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition: D1226, D1233, D1236, D1239]

C1.34 The operator shall limit the duration of startup to no more than 8 hour(s).

For the purpose of this condition, "duration of startup" shall be defined as the duration beginning immediately following initial firing of the gas turbine.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

C1.X1 The operator shall limit the firing rate to no more than 1069.9 MM Btu per hour.

For the purpose of this condition, firing rate shall be defined as energy or heat input of natural gas and refinery fuel gas to the equipment combustion chamber based on the higher heating value (HHV) of the natural gas and refinery fuel gas used.

The refinery gas input to the turbine in any hour shall not exceed 35% of the total volume of gas combusted. Refinery gas shall be as defined in condition B61.X1.

To comply with this condition, the operator shall install and maintain a(n) continuous monitoring system to accurately indicate the energy being supplied to the turbine.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1]

C1.X2 The operator shall limit the firing rate to no more than 510 MM Btu per hour.

For the purpose of this condition, firing rate shall be defined as energy or heat input of natural gas and refinery fuel gas to the equipment combustion chamber based on the higher heating value (HHV) of the natural gas and refinery fuel gas used.



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

To comply with this condition, the operator shall install and maintain a(n) continuous monitoring system to accurately indicate the energy being supplied to the duct burner.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX2]

C157.X The operator shall install and maintain a pressure relief valve set at 30 psig.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX3]

D12.1 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the fuel usage at the gas turbine for each fuel being fired.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within + or -5.0 percent. It shall be calibrated once every 12 months.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: **DX1**, D1226, D1233, D1236, D1239]

D12.2 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the steam-to-fuel ratio at the gas turbine for each fuel fired.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within + or -5.0 percent. It shall be calibrated once every 12 months.



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

D12.X1 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the energy input at the gas turbine by measurement of Higher Heating Value (HHV) of refinery fuel gas.

The operator shall also install and maintain a device to continuously record the parameter being measured.

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

The purpose of this condition is to demonstrate compliance with the limitation of refinery fuel gas, as having natural gas accounting for no more than 50% of the Higher Heating Value (HHV) of the mixture.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

D12.X2 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: CX1]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

D12.X3 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

For the purpose of this condition, continuously record shall be defined as recording at least once every week and shall be calculated based upon the average of the continuous monitoring for the week.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

D12.X4 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH3).

The operator shall also install and maintain a device to continuously record the parameter being measured and to continuously record the ammonia to emitted NOx mole ratio.

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

The measuring device or gauge shall be accurate to within + or -5.0 percent. It shall be calibrated once every 12 months.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: CX1]

D12.X5 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the CO catalyst reactor in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, continuously record shall be defined as recording at least once every week and shall be calculated based upon the average of the continuous monitoring for the week.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX2]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least annually.

The test shall be conducted to determine the NOX emissions at the outlet.

The test shall be conducted to determine the SOX emissions at the outlet.

The test shall be conducted to determine the flow rate at the outlet.

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted to determine the total hydrocarbon emissions at the outlet.

The test shall be conducted to determine the total PM emissions at the outlet.

The test shall be conducted to determine the NH3 emissions at the outlet.

The test shall be conducted to determine the formaldehyde emissions at the outlet.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

D29.X1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of APC No. 5
CO emissions	District method 100.1	1 hour	Outlet of APC No. 5
SOX emissions	Approved District method	District-approved averaging time	Fuel Sample
ROG emissions	Approved District method	1 hour	Outlet of APC No. 5
PM10 emissions	Approved District method	District-approved averaging time	Outlet of APC No. 5
NH3 emissions	Approved District method	1 hour	Outlet of APC No. 5

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine and duct burner during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical techniques.

The test shall be conducted within 90 days after achieving maximum production rate, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH) for each fuel, Higher Heating Value (HHV) of fuel gas other than natural gas, the flue gas flow rate, and the turbine generating output in MW.

The test shall be conducted when this equipment is operating at loads of 90 percent or greater, 75 percent, and 50 percent of maximum design capacity.

For natural gas/refinery gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400 -500 mm Hg absolute, b) Pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA Method TO-12 (with pre concentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

> may be used in lieu of AQMD Method 25.3 without prior approval except for determination of compliance with VOC BACT level of 2.0 ppmv, calculated as carbon for natural gas/refinery gas fired turbine.

Because the VOC BACT level was set using data derived from various source test results, this alternate VOC compliance method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test shall be reported with two significant digits,

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2005, 5-6-2005

[Devices subject to this condition: DX1, DX2]

D29.X2 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	Approved District method	1 hour	Outlet of APC No. 5

The test shall be conducted and the results submitted to the District within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, the test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

D29.X3 The operator shall conduct source test(s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	Approved District method	District-approved	Fuel Sample
		averaging time	1
VOC emissions	Approved District method	1 hour	Outlet of APC No. 5

The test(s) shall be conducted at least once every three years after the initial source test, required under condition D29.X1.



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The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH) for each fuel, Higher Heating Value (HHV) of fuel gas other than natural gas, the flue gas flow rate, and the turbine generating output in MW.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine and duct burner during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical techniques.

The test shall be conducted when the equipment is operating at 90 percent or greater of maximum capacity.

For natural gas/refinery gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400 -500 mm Hg absolute, b) Pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmy total hydrocarbon as carbon, and c) Analysis of canisters are per EPA Method TO-12 (with pre concentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval except for determination of compliance with VOC BACT level of 2.0 ppmv, calculated as carbon for natural gas/refinery gas fired turbine.

Because the VOC BACT level was set using data derived from various source test results, this alternate VOC compliance method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test shall be reported with two significant digits.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2]



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D29.X4 The operator shall conduct source test(s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM10 emissions	Approved District method	District-approved	Outlet of APC No. 5
		averaging time	

The test shall be conducted when the equipment is operating at 90 percent or greater of maximum design capacity.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH) for each fuel, Higher Heating Value (HHV) of fuel gas other than natural gas, the flue gas flow rate, and the turbine generating output in MW.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine and duct burner during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical techniques.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

D82.X1 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.



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The CEMS shall be installed and operated to measure CO concentration over one-hour and three-hour averaging time periods.

The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2)-PSD-BACT, 10-7-1988]

[Devices subject to this condition: DX1, DX2]

D82.X2 The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv SOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine and shall comply with the requirements of Rules 2011 and 2012. During the interim period between the initial startup and provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2011(f)(2) and 2011(f)(3) and Rule 2012(h)(2) and 2012(h)(3). Within two weeks after the turbine startup date, the operator shall provide written notification to the District of the exact date of startup.

[RULE 2011, 5-6-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

D90.3 The operator shall periodically analyze the fuel gas for total sulfur content in the refinery gases and butane used in the cogeneration facility according to the following specifications:

The operator shall analyze once every week.

[RULE 2005, 5-6-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

D90.4 The operator shall continuously monitor the H2S concentration in the fuel gases being burned in this device according to the following specifications:

The operator shall use Gas Chromatograph meeting the requirements of 40CFR60 Subpart J to monitor the parameter.

The operator shall install and maintain a device to continuously record the parameter being monitored.

The operator may monitor the H2S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned in this device.

[40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

D90.17 The operator shall periodically monitor the H2S concentration at the inlet of this device according to the following specifications:

The Alternative Monitoring Plan (AMP) approved by the United States Environmental Protection Agency (USEPA) on July 11, 2003 for the periodic monitoring and reporting of H2S concentration for refinery gas streams to four WCC turbines.

In addition, the operator shall also comply with all other requirements of the AMP issued by the USEPA on July 11, 2003 for four WCC turbines.

[40CFR 60 Subpart A, 6-13-2007; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

D90.X1 The operator shall continuously monitor Total Reduced Sulfur compounds, calculated as concentration of H2S, in the fuel gases being burned in this device according to the following specifications:

The continuous monitoring system shall be approved by the District prior to initial startup.



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The operator shall also install and maintain a device to continuously record the parameter being monitored.

The operator may monitor Total Reduced Sulfur compounds, calculated as concentration of H2S, at a single location for fuel combustion devices if monitoring at this location accurately represents the concentration of Total Reduced Sulfur compounds in fuel gas being burned in this device.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

D90.X2 The operator shall continuously monitor the H2S concentration in the fuel gases being burned in this device according to the following specifications:

The operator shall use Gas Chromatography meeting the requirements of 40CFR60 Subpart Ja to monitor the parameter.

The operator shall also install and maintain a device to continuously record the parameter being monitored.

The operator may monitor the H2S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned in this device.

[40CFR 60 Subpart Ja, 6-24-2008]

[Devices subject to this condition: DX1, DX2]

D94.1 The operator shall install, maintain, and operate a sampling line from the sampling port and made accessible in the gas turbine exhaust duct and after the waste heat recovery boiler in accordance with District guidelines.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: **DX1**, D1226, D1233, D1236, D1239]

E17.1 The operator shall not use more than 4 of the following items simultaneously:



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FACILITY PERMIT TO OPERATE BP WEST COAST PROD. LLC BP CARSON REF.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

Device ID: D1226 [TURBINE, W/ TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW]

Device ID: D1233 [TURBINE, W/ TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW]

Device ID: D1262 [BOILER, NO. 42, WITH 2 AIR PREHEATERS AND 2 FORCED DRAFT FANS]

Device ID: D1226 [TURBINE, W/ TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW]

Device ID: D1236 [TURBINE, W/ TWO GAS STOP/RATIO VALVES, WITH STEAM INJECTION, DRIVING A 90.87 MVA ELECTRIC GENERATOR, SITE RATED AT 82.72 MW]

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

E54.1 The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: D2808 [DRUM, KNOCK OUT, VERTICAL, SFIA VAPOR RECOVERY WEST]

Requirement number 1: During periods of startup and shutdown modes

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

E57.X1 The operator shall vent this equipment to dust control equipment whenever SCR catalyst loading/unloading or handling/transport operations produces catalyst fines.



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

E71.1 The operator shall not fire this equipment during the startup mode of operation.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1227, D1234, D1237, D1240]

E73.1 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use steam injection if any of the following requirement(s) are met:

Startup and shutdown modes of operation.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

E73.X1 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if the following requirement(s) are met:

Temperature measured at the SCR inlet is less than 500 Deg F, not to exceed 3 hours during cold startup.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: CX1]

E144.X The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: DX3]



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E226.1 The following condition number(s) shall only apply if any of the requirement(s) stated below are met:

Condition number 17-1

Requirement 1: Boiler No. 42 is in operation

FRULE 1303(b)(2)-Offset, 5-10-1996

[Devices subject to this condition: D1226, D1233, D1236, D1239]

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	J

[40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; 40CFR60 Subpart GGG, 6-2-2008]

[Devices subject to this condition: D2585, D2586, D2587, D2588]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

H23.18 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	GG
SOX	40CFR60, SUBPART	GG
H2S	40CFR60, SUBPART	J

[40CFR60 Subpart GG, 2-24-2006; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

H23.19 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	J
NOX	40CFR60, SUBPART	Db

[40CFR60 Subpart Db, 1-28-2009; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1227, D1234, D1237, D1240]

H23.X1 This equipment is subject to the applicable requirements of the following rules and regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	KKKK
SOX	40CFR60, SUBPART	KKKK

[40 CFR 60 Subpart KKKK, 6-6-2006]

[Devices subject to this condition: DX1]



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

H23.X2 This equipment is subject to the applicable requirements of the following rules and regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	Ja

[40 CFR 60 Subpart Ja, 6-24-2008]

[Devices subject to this condition: DX1, DX2]

1296.X1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall, prior to the 1st compliance year hold a minimum NOx RTCs of 99,850 lbs/yr and a minimum SOx RTCs of 31,050 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the gas turbine/heat recovery steam generator.

[2005, 5-6-2005]

[Devices subject to this condition: DX1, DX2]

K40.X The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF. Solid PM emissions shall be calculated and expressed as lbs/MMBTU.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).



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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE The operator shall comply with the terms and conditions set forth below:

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen and carbon dioxide levels in the exhaust; fuel flow rate (SCFH) for each fuel fired; Higher Heating Value (HHV), total sulfur concentration, and H2S concentration of refinery fuel gas; the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; ; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2]

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Type and quantity of fuel usage, ammonia usage, actual and corrected NOX emission concentration

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: **DX1**, D1226, D1233, D1236, D1239]

K67.X1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Commissioning hours, type of control, and fuel use

Date and time of each start-up and shutdown

In addition to the requirements of a certified CEMS, fuel use records shall be kept during and after the commissioning period and prior to CEMS certification

Minute by minute data (NOX and O2 concentration and fuel flow at a minimum) for each turbine start-up

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: DX1, DX2]